

BALDOR • RELIANCE

Customer information packet

L3504M

.5HP, 1725RPM, 1PH, 60HZ, 56, 3421L, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.700 A @ 230.0 V 4.300 A @ 208.0 V 7.400 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	AE
Type	AC
Mech. spec.	34K050
Base	
Status	PRD/A
Elec. spec.	34WG5594
Layout	34LYK050
Eff. date	09-18-2023
CD Diagram	CD0008
Poles	04
Leads	6#18,1#16 #4TH
Proprietary	False
Created date	01-01-0001

High Voltage Full Load Amps	3.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3421L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.97 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1725 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Manual Thermal Overload
Winding Thermal 1 Location	SB

Winding Thermal 2

None

Nameplate

NP1257L	
CAT.NO.	L3504M
SPEC.	34K50-5594
HP	.5
VOLTS	115/230
AMP	7.4/3.7
RPM	1725
FRAME	56 HZ 60 PH 1
SER.F.	1.25 CODE J DES N CL B
NEMA-NOM-EFF	68 PF 66
RATING	40C AMB-CONT
CC	
DE	6203 ODE 6203
ENCL	TEFC SN
	SFA 8.2/4.1

Accessories

Part number	Description	Multiplier
34-171	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 6781

Typical performance - not guaranteed values

Winding: 34WG5594-R001		Type: 3421L		Enclosure: TEFC	
Nameplate Data			230 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	.5		Full Load Torque	1.5 LB-FT	
Volts	115/230		Start Configuration	direct on line	
Full Load Amps	7.4/3.7		Breakdown Torque	4.13 LB-FT	
R.P.M.	1725		Pull-up Torque	3.6 LB-FT	
Hz	60 Phase	1	Locked-rotor Torque	4.65 LB-FT	
NEMA Design Code	N	KVA Code	J	Starting Current	16.5 A
Service Factor (S.F.)	1.25		No-load Current	2.8 A	
NEMA Nom. Eff.	68	Power Factor	66	Line-line Res. @ 25°C	4.44 Ω A Ph 3.19 Ω B Ph
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	63°C	
S.F. Amps	8.2/4.1		Temp. Rise @ S.F. Load	77°C	

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	46	59	66	72	80	72
Efficiency	42	58	65	68	69	68	69
Speed	1783	1765	1750	1730	1710	1680	1710
Line amperes	2.8	3	3.3	3.7	4.1	4.8	4.1

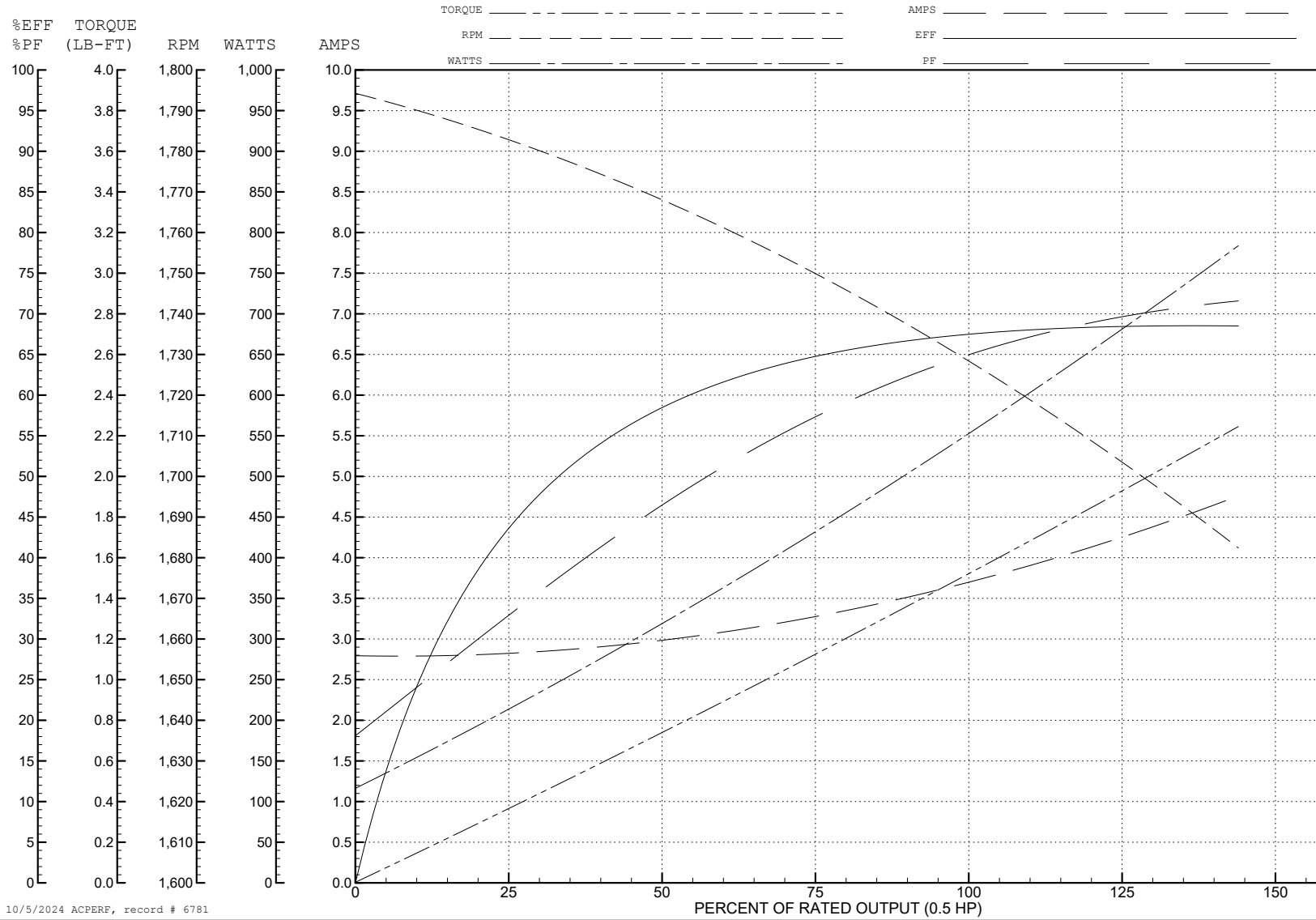
ABB Motors and Mechanical Inc.

WINDING # 34WG5594

0.5 HP 1 PH 60 HZ 1725 RPM 230 V 3421L

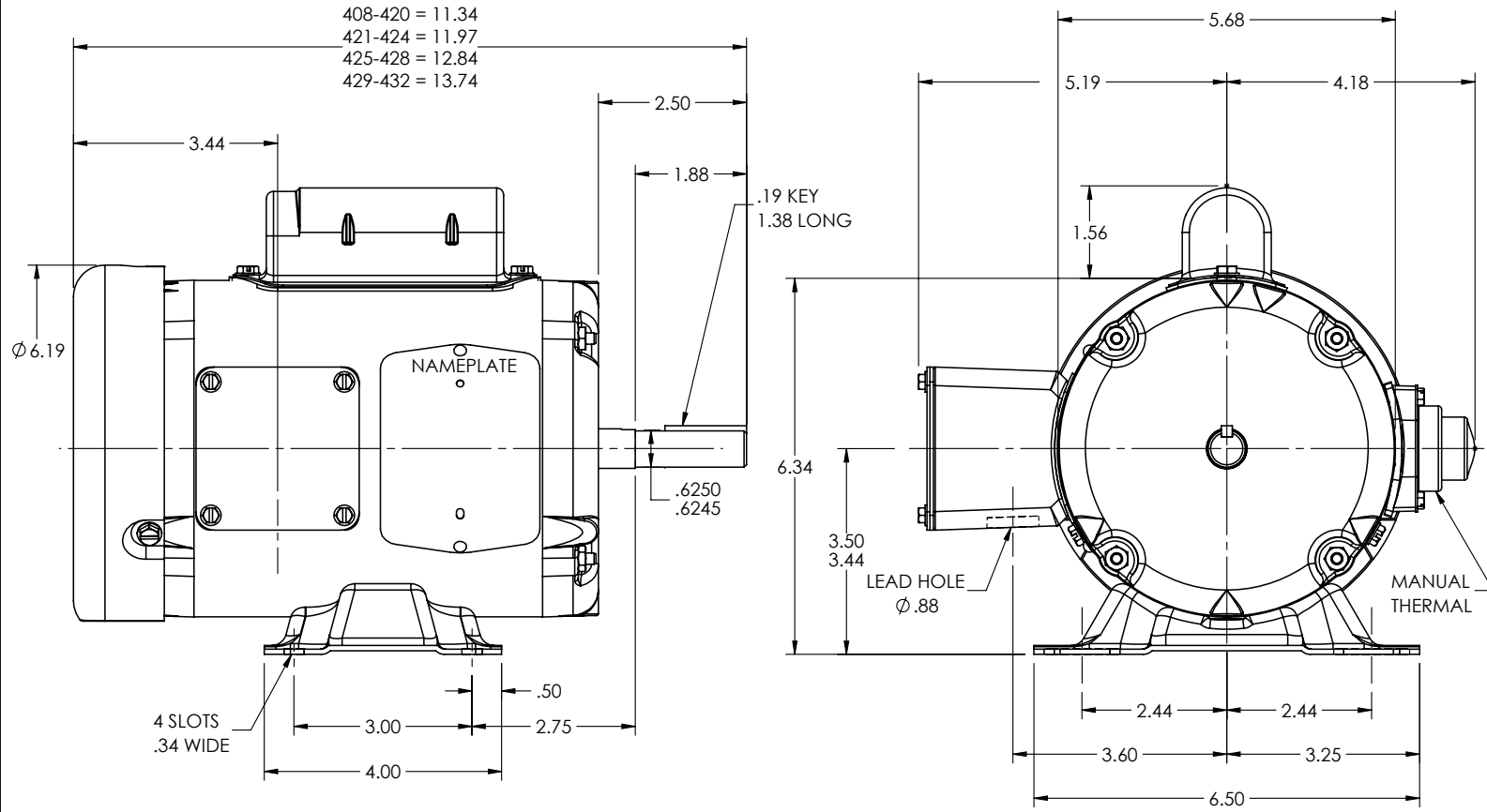
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=4.13 PU=3.6 LR=4.65 LRA=16.5



10/5/2024 ACPERF, record # 6781

34LYK050



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

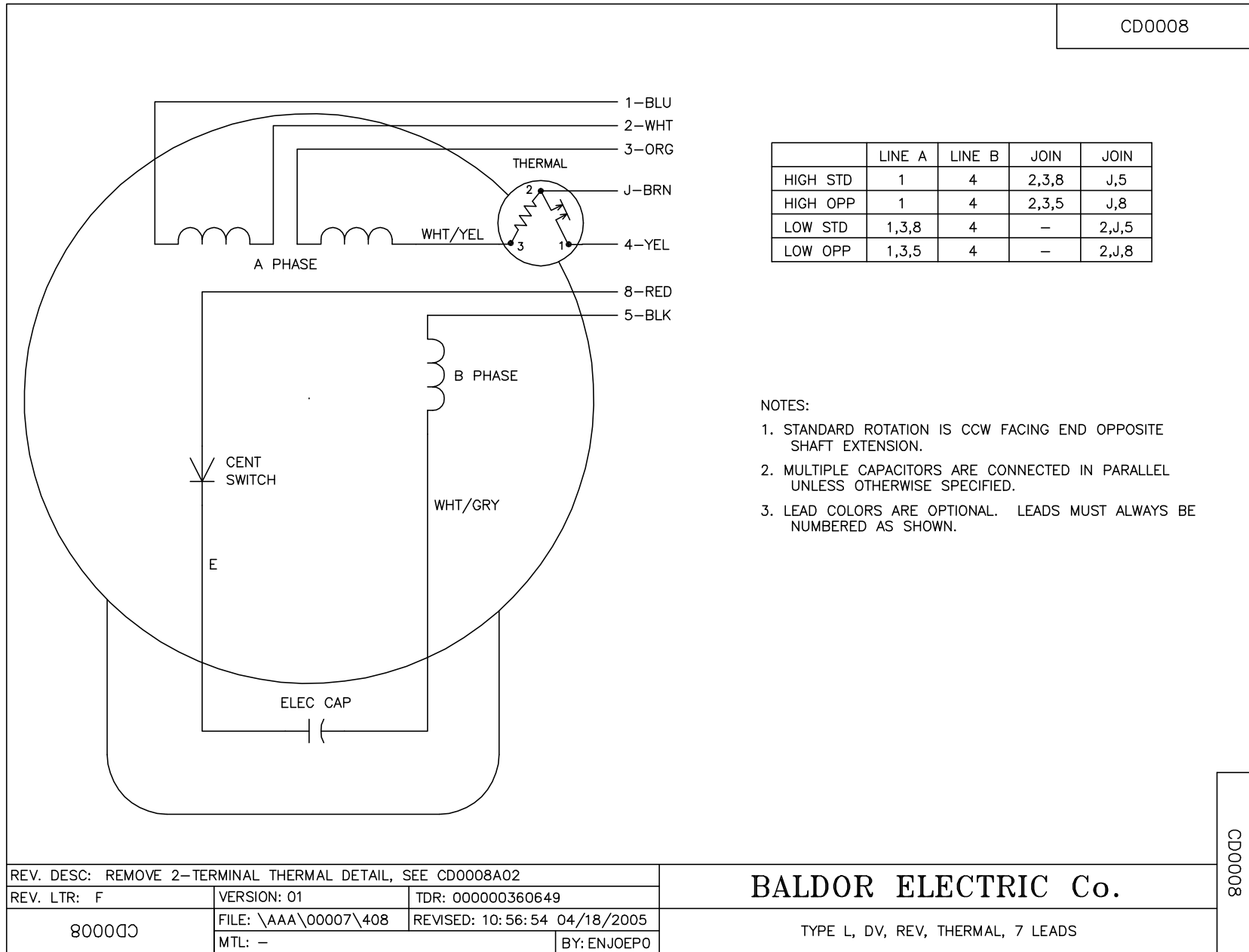
REV. DESC: LOAD TO SOLIDWORKS			
REV: F	VERSION: 03	REVISED: 10:40:18 08/31/2022	TDR: 000001194274
34LYK050	MODEL NO. 34LYK050		REF: -
	BY: ENFRAJ0		

BALDOR - RELIANCE®

STD HORZ MODEL 34L NEMA 56 TEFC W/.75 MTO

34LYK050

CD0008



	LINE A	LINE B	JOIN	JOIN
HIGH STD	1	4	2,3,8	J,5
HIGH OPP	1	4	2,3,5	J,8
LOW STD	1,3,8	4	-	2,J,5
LOW OPP	1,3,5	4	-	2,J,8

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REMOVE 2-TERMINAL THERMAL DETAIL, SEE CD0008A02		
REV. LTR: F	VERSION: 01	TDR: 000000360649
800000	FILE: \AAA\00007\408	REVISED: 10:56:54 04/18/2005
	MTL: -	BY: ENJOEPO

BALDOR ELECTRIC Co.

TYPE L, DV, REV, THERMAL, 7 LEADS

CD0008